

CALFED Vision for the Greater Sandhill Crane



The CALFED vision for the greater sandhill crane is to protect and enhance roosting and foraging habitat that will support migratory wintering populations of sandhill cranes. This is consistent with CALFED's vision of assisting in efforts to increase the state threatened greater sandhill crane population to levels that would lead to its delisting and eliminate any future need for protection under the California Endangered Species Act. In order to attain this vision CALFED will focus work in the Delta Ecological Zone to restore the necessary ecological functions and processes within the crane's habitat and reduce or eliminate stressors and mortality sources that have disturbed the health of the population. In attaining the vision CALFED envisions protecting existing greater sandhill crane habitat in the Delta from further degradation and harm. The CALFED vision is for the restoration of ecosystem processes and functions and suitable habitats in other ecological zones north and south of the Delta in order to restore the health of the aquatic resources in and dependent on the Delta. These restoration efforts, while not specifically directed at the greater sandhill crane will, nevertheless, provide substantial benefits to the crane.

Background

The greater sandhill crane is an important biological part of the integrity and health of the Bay-Delta and the Sacramento and San Joaquin Valley ecosystem. Large wintering populations congregate within the Sacramento and San Joaquin valleys. The greater sandhill crane has been listed as threatened, and designated a fully protected species with the state of California due to its small population in the state on habitat that is threatened. Suitable wintering habitat occurs where shallow flooded grasslands provide loafing and roosting sites near agricultural areas that provide a sufficient food source such as rice, sorghum, barley, and corn.

The greater sandhill crane is an ecological indicator that ecological processes, functions and habitat elements are being altered in grassland habitats, specifically due to the loss of habitat from agricultural conversion and summer cattle grazing, and other unknown factors.

Breeding areas do not occur within the ERPP project area and therefore are not covered in this vision.

Over time, the cumulative actions of wetland drainage, agricultural practices, land use changes, and other human activities have slowly shrunk and destroyed suitable habitat for the greater sandhill crane. Through a comprehensive restoration plan that addresses the ecological processes, functions, and habitat elements the quality and production of the suitable habitats can be restored.

Ecological Health within Ecological Zones

North Sacramento Valley	D
Cottonwood Creek Watershed ...	D
Colusa Basin	D
Butte Basin	D
Feather River/Sutter Basin	D
American River Basin	D
Yolo Basin	D
Eastside Delta Tributaries	D
East San Joaquin Basin	D
West San Joaquin Basin	D
Sacramento-San Joaquin Delta ..	D
Sacramento River	D
San Joaquin River	D

Identification and Status of Key Habitats Ecosystem Processes, and Stressors

The greater sandhill crane is found in all ecosystem restoration ecological zones, except the Suisun Marsh/San Francisco Bay, and many of their respective ecological units within the Central Valley. The decline of the greater sandhill crane population has resulted from the cumulative effects of the alteration of breeding, foraging, roosting and migration habitats within California. Habitats that are being lost include: seasonal and aquatic wetland, fresh emergent wetland, perennial and annual grassland, and agricultural wetland and uplands.

The disruption of other ecological processes and added stressors have contributed to the decline of the crane population. The natural process of wildfire, vegetation succession, and floodplain inundation have been disrupted to the point where native foraging and roosting habitat has been compromised. To a lesser degree human disturbance, illegal harvest, and predation have affected the overall health of the crane population.

Land use alterations is the greatest threat the successful restoration of crane habitat. The conversion of grasslands, wetlands, and agriculture to urban development is an ongoing process and not likely to be retarded. The sandhill crane is now dependant on artificially created areas where natural wetland and grassland habitats have been eliminated.

A number of preserves and collaborative efforts have been working to stabilize and improve the greater sandhill crane status and distribution. Yet, additional measures that include available recovery plans, agencies and stakeholders are needed in order to restore the greater sandhill crane to a stable and healthy population.

Ecosystem Restoration Needs and Opportunities

The restoration of the greater sandhill crane population to a healthy state will require a coordinated approach to improving the ecosystem functions and processes, restoring habitat, protecting existing habitat, and reducing or eliminating stressors.

Ecosystem Processes

The operation of the water storage and conveyance systems throughout the Central Valley are necessary for the protection of lives and property of the citizens of California. But the control and prevention of overbank flooding and flood plane inundation prevent the secondary processes which are critical components of the ecological system needed by the crane and other species. Through the restoration of natural river meanders and floodplain CALFED will strive to improve crane wintering and foraging habitat.

Another processes to initiate is controlled burns which improve foraging areas by maintaining open shortgrass plains. These plains may also provide roosting habitat when flooded.

Habitat Restoration

The restoration of seasonal wetland and aquatic habitats, fresh emergent wetland, perennial and

annual grassland, and agricultural wetland and uplands will provide the necessary roosting and foraging habitat required by the crane.

The protection and restoration of habitats used by the crane will have restoration opportunities for a number of other species including waterfowl, recreational and sport fishes, and added benefits for public recreation, agriculture protection, and water quality.

Stressors

Land use conversion of grassland, wetlands, and agriculture in greater sandhill crane habitat also directly affect waterfowl. Management plans with federal, and state agencies are in place and will protect the welfare of the crane in those targeted areas. CALFED efforts to improve the resource will expand these programs and coordinate with other agencies to protect present and future crane habitat and to enforce laws protecting cranes to reduce mortality on migration routes, wintering areas and breeding grounds.

The management of cattle grazing within crane habitat will eliminate overgrazing and protect the functions and processes of short grasslands for the crane.

Linkage to Other Restoration Programs

Pacific Flyway Management Plan for the Central Valley population of greater sandhill cranes is a related program. The Central Valley Habitat Joint Venture Implementation Plan has set goals to protect and restore Central Valley aquatic and upland habitats that are needed for waterfowl. Indirectly this plan benefits the greater sandhill crane and other species that use these wetland and upland habitats.